

## ABSTRACT

The invention relates to an improved method for the anodic alkoxylation of an organic compound with an alcohol comprising between 1 and 4 C atoms, in particular methanol, in a reactor comprising a membrane electrode assembly (MEA). The invention uses a reactor  
5 comprising an MEA that contains a cation exchange membrane or a microporous polypropylene membrane, whereby one or both electrode layers were created using carbon black and/or graphite, optionally doped with a heavy metal and a sulfonated, polyfluorinated polymer or copolymer in a liquid suspension containing a suspension medium.